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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,318	10/22/2003	Ho Ming Chun	3086/1427	8555

28533 7590 11/17/2005

IN RE: ALTICOR INC. 28533
BRINKS, HOFER, GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER	
VANIK, DAVID L	

ART UNIT	PAPER NUMBER
1615	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/692,318	CHUN ET AL.	
	Examiner	Art Unit	
	David L. Vanik	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 20-22* is/are pending in the application.

4a) Of the above claim(s) *12-19* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 20-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Receipt is acknowledged of the Applicant's Remarks and Amended Claims filed on 9/12/2005.

As a result of Applicant's amended claims, the *35 USC §102* rejection over US Patent 5,380,359 ('359) is hereby **withdrawn**. The *35 USC §103* rejections over US Patent 5,454,841 ('841) in view of US Patent 4,668,235 ('235) or US patent 6,605,577 ('577) are hereby **maintained**. Additionally, the *35 USC §103* rejection of Claim 20 over US Patent 5,454,841 ('841) in view of US Patent 4,668,235 ('235) and further in view of WO/01/05363 ('363) are hereby **maintained**.

MAINTAINED REJECTIONS:

The following rejections are maintained. As a result of Applicant's claim additions, newly added claims 21-22 are rejected over US Patent 5,454,841 ('841) in view of US Patent 4,668,235 ('235) and further in view of WO/01/05363 ('363).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,454,841 ('841) in view of US Patent 4,668,235 ('235) or US patent 6,605,577 ('577).

'841 teach hair care compositions comprising water-soluble melanin (abstract). The hair care compositions advanced by '841 further comprise cationic surfactants (column 2, line 47 – column 3, line 8 and Claims 1-2). According to '841, quaternary ammonium polymers such as Polyquaternium-11 can be used in the hair care composition (column 2, line 67). The amount of melanin used in the composition is between 0.1% to about 5.0% and the ratio of melanin to cationic material is from 1:4 to about 10:1 (Claim 1). As a compound, melanin has both UV absorbing and anti-oxidizing properties (See US Patent 5,380,359). As a result, the compositions described by '841 further comprise an anti-oxidant.

Claims 8 and 9 are product-by-process claims. As such, claims 8 and 9 will be treated as product claims and not as method claims. Whether melanin is synthesized or sunflower-derived is given no patentable weight. It should also be noted that it is the examiner's position that modifying and optimizing the above shampoo components to suitable levels without adversely affecting the skin or the active component is deemed to be within the scope of the skilled artisan.

'841 does not teach benzotriazolyl butylphenol or a benzotriazole derivative.

'235 teach a method for protecting natural or synthetic fibers with benzotriazole derivatives including benzotriazolesulfonates (abstract and column 1, lines 1-65). According to '235, benzotriazole derivatives protect natural protein, such as that found in hair, against photodegradation and phototendering (column 1, lines 27-40). There are other reasons it is advantageous to use benzotriazolesulfonates, especially benzotriazolyl butylphenol sulfonate, in hair care products. Benzotriazolyl butylphenol sulfonate can also be employed as an effective emulsifier in shampoo compositions (See US Patent 6,605,577 column 5, lines 28-29). Because benzotriazolyl butylphenol and benzotriazole derivatives are effective UV absorbers, able to protect natural proteins against photodegradation and phototendering, one of ordinary skill in the art would have been motivated to add a benzotriazole-based compound to the hair care composition advanced by '841. Based on the teachings of '235, there is a reasonable expectation that benzotriazolyl butylphenol and benzotriazole derivatives would protect

natural proteins, such as those found in hair, against photodegradation and phototendering. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate benzotriazolyl butylphenol or benzotriazole derivatives in the shampoo composition advanced by '841 in view of the teachings of '235.

Response to Arguments

Applicant's arguments filed on 9/12/2005 have been fully considered but they are not persuasive. In response to the 6/17/2005 Non-Final Rejection, Applicant has asserted that 'the '841 patent teaches away from the addition of benzotriazolyl butylphenol or a benzotriazole derivative to a melanin, UV absorber, and cationic surfactant-based composition because the '841 composition is concerned with the temporary coloring of hair. As such, Applicant asserts that it would not be obvious to one of ordinary skill in the art at the time the invention to combine the teachings of US Patent 5,454,841 ('841) with either US Patent 4,668,235 ('235) or US patent 6,605,577 ('577). The examiner respectfully disagrees with this assertion.

According to '235, benzotriazole derivatives protect protein, such as that found in hair, against photodegradation and phototendering (column 1, lines 27-40). As compounds capable of protecting hair or fibers from the damaging effects of the sun, one of ordinary skill in the art would be motivated to add benzotriazole derivatives to a hair care product. The fact that the hair care product advanced by '841 is formulated as

a temporary haircolor is immaterial. It is the examiner's position that, because benzotriazolyl butylphenol and benzotriazole derivatives are effective UV absorbers and are able to protect proteins against photodegradation and phototendering, one of ordinary skill in the art would have been motivated to add a benzotriazole-based compound to the hair care composition advanced by '841. Based on the teachings of '235, there is a reasonable expectation that benzotriazolyl butylphenol and benzotriazole derivatives would protect natural proteins, such as those found in hair, against photodegradation and phototendering. The result of the addition of benzotriazole derivatives to the hair care product advanced by '841 is expected to be a hair care composition capable of both coloring hair and protecting hair from photodegradation and phototendering. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate benzotriazolyl butylphenol or benzotriazole derivatives in the shampoo composition advanced by '841 in view of the teachings of '235.

Additionally, as suggested by '577, benzotriazolyl butylphenol sulfonate can also be employed as an effective emulsifier in shampoo compositions. Since hair care compositions, based on particular application, are oftentimes formulated as emulsions, it is the examiner's position that one of ordinary skill in the art at the time the invention was made would have had the motivation to add an effective emulsifier, such as benzotriazolyl butylphenol sulfonate, to a hair-care composition.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,454,841 ('841) in view of US Patent 4,668,235 ('235) and further in view of WO/01/05363 ('363).

The teachings of '841 and '235 are enumerated above. Neither '841 nor '235 teach a composition comprising cinnamidopropyltrimonium chloride.

'363 teach a sunscreen composition comprising a sunscreen agent in combination with a cinnamido alkyl amine cationic quaternary salt (abstract). According

to '363, the preferred cinnamido alkyl amine cationic quaternary salt is cinnamidopropyltrimonium chloride (page 5, lines 24-30). It is advantageous, according to '363, to add cinnamidopropyltrimonium chloride to a composition because it imparts grooming and styling benefits to a composition and has UV absorbing properties (page 5, lines 24-30). Because cinnamidopropyltrimonium chloride is an effective UV absorber and imparts grooming and styling benefits to a composition, one of ordinary skill in the art would have been motivated to add a cinnamidopropyltrimonium chloride to the hair care composition advanced by '841. Based on the teachings of '363, there is a reasonable expectation that cinnamidopropyltrimonium chloride would help protect hair from sun damage and make hair easier to groom and style. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate cinnamidopropyltrimonium chloride in the shampoo composition advanced by '841 in view of the teachings of '363.

Response to Arguments

Applicant's arguments filed on 9/12/2005 have been fully considered but they are not persuasive. In response to the 6/17/2005 Non-Final Rejection, the Applicant has asserted that it would not be obvious to one of ordinary skill in the art at the time the invention to combine the teachings of US Patent 5,454,841 ('841) in view of US Patent 4,668,235 ('235) and further in view of WO/01/05363 ('363). The examiner respectfully disagrees with this assertion.

For the reasons stated above, it is the examiner's assertion that it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a benzotriazole derivative to the hair care composition advanced by '841. Additionally, it is the examiner's position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to add cinnamidopropyltrimonium chloride to the hair care composition advanced by '841. Because cinnamidopropyltrimonium chloride is an effective UV absorber and imparts grooming and styling benefits to a composition, one of ordinary skill in the art would have been motivated to add a cinnamidopropyltrimonium chloride to the hair care composition advanced by '841. Based on the teachings of '363, there is a reasonable expectation that cinnamidopropyltrimonium chloride would help protect hair from sun damage and make hair easier to groom and style.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Vanik whose telephone number is (571) 272-3104. The examiner can normally be reached on Monday-Friday 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carlos Azpuru, can be reached at (571) 272-0588. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Vanik, Ph.D.
Art Unit 1615

11/11/2005

CARLOS A. AZPURU
PRIMARY EXAMINER
GROUP 1500